

F.S.M. Traffic Study Guidelines
Checklist for Application Acceptance
Page 1 of 4

Loudoun County Virginia
Office of Transportation Services

Application Name: Nextel Communications Date: 3/8/07
Application Type: Special Exception / Commercial Reviewer: Doug R. Phillips
of Guidelines Satisfied: 12 of 12 Permitted
Accept or Reject: Accept Comment: _____

- ° (1) **Study Area:** Roadways internal or adjacent to the development site shall be included in the traffic study. The study area should be defined at the scoping meeting and as a guideline should include other external roads to the extent that the project's generated traffic is anticipated to exceed 15 percent of the road's current/existing traffic volumes (at the time of application). This area shall not extend more than five (5) miles from the project site.

Does Study Meet Guidelines? yes Comments: Smith Switch Road /
existing site

- (2) **Traffic Count Locations:** Traffic counts are required on the adjacent roads, the adjacent intersections beyond the project's frontage on adjacent roads in the study area. The AM/PM peak period traffic counts shall not be more than twelve (12) months old at the time of the application submission.

Does Study Meet Guidelines? yes Comments: N.A.

- (3) **Trip Generation:** As a general guide to vehicle trip generation, the latest edition of the Institute of Transportation Engineer's (I.T.E.). Trip Generation Report shall be used. These rates may be supplemented by additional information provided by the County. If the applicant chooses to use different rates, they shall be documented and agreed to at the scoping meeting prior to their use in the traffic analyses. Primary trip reductions associated with passby trips and methodologies for trip reductions associated with passby trips shall be discussed and agreed upon at the scoping meeting.

Does Study Meet Guidelines? yes Comments: See page 12 of
the description (0) only one trip per month

- (4) **Traffic Volume Projections**: The traffic study shall provide existing and projected traffic volumes, with and without the subject project, for average daily traffic (ADT), as well as AM and PM peak hours. The peak hour of the project/individual land use(s) (as given in the ITE Trip Generation Report) should be added to the corresponding AM/PM existing peak hour of the adjacent roadway traffic volumes (to show the worst case scenario), if the peak hour of the project/individual land use(s) for the generator is greater than the peak hour of the adjacent roadway (per ITE Trip Generation Report). The existing peak hour of traffic on the roads adjacent to the subject project site shall be identified. These traffic volumes shall be provided at roadway intersections and commercial or private access ways/entrances.

Does Study Meet Guidelines? yes Comments: N.A.

- (5) **LOS Analysis**: Level of Service (LOS) calculations for existing and projected conditions, with and without the subject project, for highway segments, intersection legs, and entrances shall be provided. Calculations shall be in accordance with the Highway Capacity Manual (HCM) and/or the Highway Capacity Software (HCS), or as may be agreed at the scoping meeting. Traffic volumes and level of service information shall be provided for each phase of development, to include conditions at date of project completion. Projections shall also be made for date of completion plus ten (10) years.

Does Study Meet Guidelines? yes Comments: N.A.

- (6) **Minimum Roadway/Intersection LOS Standards**: Recommendations for phased improvements to the road network links in order to maintain an acceptable level of service (minimum LOS "D") shall be provided. For each phase up to and including buildout, a minimum approach and overall LOS "D" at intersections shall apply.

Does Study Meet Guidelines? yes Comments: N.A.

- (7) **Background Traffic Assumptions**: Assumptions which determine projected background traffic, including through traffic growth rate to be applied on roadway links, shall be confirmed at the scoping meeting. Specific other approved development names and respective development square footage or residential units in the study shall be provided.

Does Study Meet Guidelines? yes Comments: N.A.

- (8) **Traffic/Trip Distribution**: Directional trip distribution information shall be provided for project entrances and collector and arterial intersections within the study area for the phases of development.

Does Study Meet Guidelines? yes Comments: N.A.

- (9) **LOS Calculations Assumptions**: Traffic counts and level of service (LOS) worksheets and projected traffic volume level of service (LOS) analyses, including existing AM/PM peak hour signal timing, shall be included as a part of the traffic study.

Does Study Meet Guidelines? yes Comments: N.A.

- (10) **Mode Choice**: Modal split information shall be provided for the phases of the analysis, with sources of information identified (e.g., COG model).

Does Study Meet Guidelines? yes Comments: N.A.

- (11) **Safety Locations**: Road safety hazards, as identified by the ISTEA set-aside funding criteria and/or as identified by the County at the scoping meeting, within the study area shall be analyzed for all roadway links and intersections in the traffic study.

Does Study Meet Guidelines? yes Comments: Existing Features / OK

- (12) **Traffic Mitigation Measures**: If trip reduction factors are used in the study, measures necessary to implement the reduction must be specified, with supporting documentation.

Does Study Meet Guidelines? yes Comments: As A

communicate and emergency service responders are better able to locate those who are lost or victims of an accident. Residents, businesses and commuters will experience improved service along Loudoun County Parkway and in the general vicinity.

- (J) Whether the traffic expected to be generated by the proposed use will be adequately and safely served by roads, pedestrian connections and other transportation services. *The proposed use will be an unmanned facility, therefore, the traffic patterns will not be adversely affected. Once the facility is constructed, normal traffic will include approximately one visit per month by a service technician for regular maintenance.*
- (K) Whether, in the case of existing structures proposed to be converted to uses requiring a special exception, the structures meet all code requirements of Loudoun County. *N/A. Nextel requests special exception for the construction of a new structure. If approved, the new structure will comply with all code requirements of Loudoun County.*
- (L) Whether the proposed special exception will be served adequately by essential public facilities and services. *The proposed use will not generate demand for essential public facilities and services as it is an unmanned facility, not intended for human habitation.*
- (M) The effect of the proposed special exception on groundwater supply. *The proposed special exception will have no effect on the groundwater supply.*
- (N) Whether the proposed use will affect the structural capacity of the soils. *A geotechnical study will be performed prior to construction of the facility. The facility will be designed so as not to affect the structural capacity of the soils.*
- (O) Whether the proposed use will negatively impact orderly and safe road development and transportation. *The proposed use will have no impact orderly and safe road development and transportation. Once the facility is constructed, normal traffic will include approximately one visit per month by a service technician for regular maintenance.*
- (P) Whether the proposed special exception use will provide desirable employment and enlarge the tax base by encouraging economic development activities consistent with the Comprehensive Plan. *The proposed special exception will generate jobs during the construction phase as well as ongoing employment for maintenance of the facility. By providing wireless telecommunications service in the area, the proposed special exception can advance competition while promoting communications which is essential for business growth and development.*